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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/807,336	03/24/2004	William A. Peterson JR.	051252-5050-03	3493

7590 02/09/2006

SEIMENS CORPORATION  
INTELLECTUAL PROPERTY DEPARTMENT  
170 WOOD AVENUE SOUTH  
ISELIN, NJ 08830

EXAMINER

MCGRAW, TREVOR EDWIN

ART UNIT	PAPER NUMBER
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3752

DATE MAILED: 02/09/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/807,336

Applicant(s)

PETERSON, WILLIAM A.

Examiner

Trevor McGraw

Art Unit

3752

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 03 January 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 16-27 is/are pending in the application.
- 4a) Of the above claim(s) 16-22 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 23-27 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 8/30/04 & 3/24/04.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

## **DETAILED ACTION**

### ***Response to Arguments***

1. Applicant's arguments filed 01/03/2006 have been fully considered but they are not persuasive. In regard to applicant's assertion that Groups II and III of the Restriction Requirement mailed 12/01/2005 are capable of being used together are not persuasive. Group II and Group III can be used separate independently of each other for use with any fuel injector. Therefore, restriction requirement is deemed proper. Claims 16-22 are withdrawn from further consideration. Claims 16-22 are withdrawn from further consideration pursuant to 37 CFR 1.142(b), as being drawn to a nonelected groups I and II, there being no allowable generic or linking claim. Applicant timely traversed the restriction (election) requirement in the reply filed on 01/03/2006.

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 23-27 are rejected under 35 U.S.C. 102(b) as being clearly anticipated by Pace et al. (5,765,750).

3. In regard to claims 23-27, Pace et al. discloses a method for fuel injection flow straightening and controlled disturbance as a means for controlling the atomization from an outlet of a fuel injector by passing fuel flow through multiple orifice disk mediums (40-Flow Element; 28-Flow Straightener; 30-Disturbance Element; 18-Discharge Orifice Disk). The orifice disk mediums are each spaced apart at a distance of a spacer (32,

34, 42). Pace et al. further teaches that the controlled disturbance element (30) controls the amount of fuel that passes from the disturbance element (30) to adjust the flow disturbance level through an outlet flow channel which passes on to a discharge orifice disk (18) that regulates the atomization of fuel toward a desired location.

***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claim 26 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Line 1 of claim 26 recites the functional limitation “comprises increasing the radial velocity between the seat orifice and each of the metering orifices”. It is unclear to the Examiner as to what “comprises increasing the radial velocity...” as increasing the radial velocity is a desired result of the method and is not an actual part or tangible piece of the fuel injector. Appropriate action is required.

5. Claim 27 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Line 1 of claim 27 recites the functional limitation “comprises decreasing the radial velocity between the seat orifice and each of the metering orifices”. It is unclear to the Examiner as to what “comprises decreasing the radial velocity...” as decreasing the radial velocity is a desired result of the method and is not an actual part or tangible piece of the fuel injector. Appropriate action is required.

6. Claim 25 is objected to because of the following informalities: Line 7 of claim 25 should read "the product" in lieu of "the a product". Appropriate correction is required.

***Specification***

7. The specification is objected to as failing to provide proper antecedent basis for the claimed subject matter. See 37 CFR 1.75(d)(1) and MPEP § 608.01(o). Correction of the following is required: Claim 25 recites the limitation "product of the first distance..." and "product of the a second distance..." in line 7. The Examiner can not find support for the respective limitation references in any of the specifications filed on 03/24/2004 or the marked up copy of the substitute specification filed 03/24/2004.

***Information Disclosure Statement***

The information disclosure statement filed 03/24/2004 fails to comply with 37 CFR 1.98(a)(2), which requires a legible copy of each cited foreign patent document; each non-patent literature publication or that portion which caused it to be listed; and all other information or that portion which caused it to be listed. It has been placed in the application file, but the information referred to therein has not been considered.

***Conclusion***

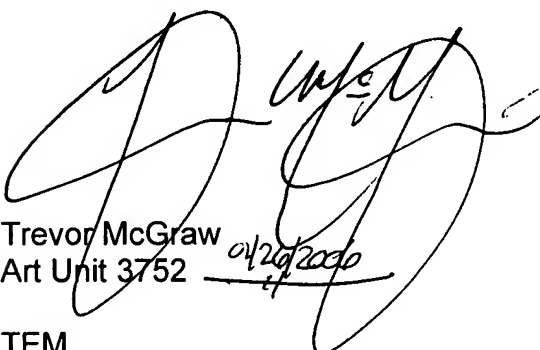
The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Pace et al. (5,765,750), Reiter (6,039,271), Nally (5,484,108), Dove et al. (5,494,124), Dove et al. (5,632,349), Dixon (4,236,674), Zimmerman et al. (5,921,474), Arndt et al. (5,924,634),.

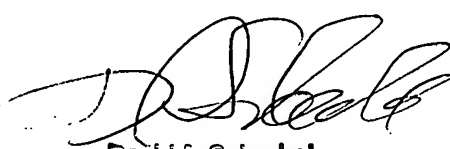
Art Unit: 3752

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Trevor McGraw whose telephone number is (571) 272-7375. The examiner can normally be reached on Monday-Friday (2nd & 4th Friday Off).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Dave Scherbel can be reached on (571) 272-4919. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
Trevor McGraw  
Art Unit 3752  
TEM

  
David A. Scherbel  
Supervisory Patent Examiner  
Group 3700

01/29/2010